12/31/00 C1 Contd.

3 9. (Twice Amended) A method as recited in Claim 1 15, further comprising the step of sending the first analog video and first digital data signals to a switching matrix within a hub [the same switching matrix, so they can all be switched and sent to various users connected to the switching matrix.] and wherein the second combined signal received on the second pair of wires was transmitted from the hub to the user interface.

Please add new claims 15 - 26, as follows:

-- 1 15. A method for the simultaneous transmission of analog video and digital data signals on a twisted pair cable, comprising the steps of:

combining a first analog video signal and a first digital data signal to create a first combined signal wherein the first combined signal is in common mode;

converting the first combined signal from common mode to differential mode;

transmitting the first combined signal on a first pair of wires in a twisted pair cable;

C2

receiving a second combined signal that includes a second analog video signal and a second digital data signal on a second pair of wires in the twisted pair cable, wherein the second combined signal is in differential mode;

converting the second combined signal from differential mode to common mode;

separating the second combined signal to obtain the second analog video signal and the second digital data signal.

4 16. The method of claim 1 15, wherein the twisted pair cable includes four twisted pairs of wire, further comprising the steps of:

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transmitting a first high-speed digital data signal on the third pair of wires in the twisted pair cable;

receiving a second high-speed digital data signal on the fourth pair of wires in the twisted pair cable.

5 4
~~17~~. The method of claim ~~16~~, wherein the first and second high-speed digital data signals are Ethernet signals.

6 4
~~18~~. The method of claim ~~16~~, wherein the first and second high-speed digital data signals are token ring signals.

C2 Cont.

7 1
~~19~~. The method of claim ~~15~~, wherein a frequency coupler is used to combine the analog video signal and the digital data signal.

8
~~20~~. A system for the simultaneous transmission of analog video and digital data signals on a twisted pair cable, comprising:

a frequency coupler for combining a first analog video signal and a first digital data signal to create a first combined signal wherein the first combined signal is in common mode;

a twisted pair termination device including:

a transmission portion for converting the first combined signal from common mode to differential mode and transmitting the first combined signal on a first pair of wires in a twisted pair cable;

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a reception portion for receiving a second combined signal that includes a second analog video signal and a second digital data signal on a second pair of wires in the twisted pair cable wherein the received second combined signal is in differential mode, and converting the second combined signal from differential mode to common mode; and

a frequency separator for separating the second combined signal to obtain the second analog video signal and the second digital data signal.

9 ~~21~~. The system of claim 8 ~~20~~, wherein the twisted pair cable includes four twisted pairs of wire, further comprising:

a high speed digital data twisted pair termination device, including

a transmission portion for transmitting a first high-speed digital data signal on the third pair of wires in the twisted pair cable;

a reception portion for receiving a second high-speed digital data signal on the fourth pair of wires in the twisted pair cable.

C2 cont.

10 ~~22~~. The method of claim 9 ~~21~~, wherein the first and second high-speed digital data signals are Ethernet signals.

11 ~~23~~. The method of claim 9 ~~21~~, wherein the first and second highspeed digital data signals are token ring signals.

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24. A system for equalizing a signal sent over twisted pair wiring, comprising:

means for sending a known reference frequency signal on the twisted pair wiring along with the signal to be equalized;

means for receiving the signal at a reception point;

means for splitting the reference frequency signal from the signal to be equalized at the reception point;

means for measuring the amount of attenuation of the reference frequency signal at the reception point;

means for providing a plurality of circuits which can boost the signal varying amounts; and

means for automatically selectively engaging said circuits to equalize the signal depending upon the amount of attenuation measured in the reference frequency.

C2 Cont.

13 12
25. A system for automatically equalizing a signal as recited in claim 24, wherein said signal to be equalized has a bandwidth sufficient to carry an analog video signal.

18
26 A system for the transmission and switching of analog video and digital data signals, comprising:

a crosspoint switch with input points and output points;

means for sending video signals to at least one of said input points;

means for simultaneously sending digital data signals to at least another of said input points;

means for switching said crosspoint switch so that both video and digital data signals are connected to respective output points at the same time;

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